

**ABSTRACT**

An apparatus for replacing lost PSTN data in a packet network and for generating variable power white noise, includes a lost packet detection unit (402) for detecting lost data packets, a data processing unit (404) for producing in response a lost data output indicating when replacement data needed, data playout unit (408) or data replacement unit (406), each may be implemented as a variable power white noise generator (Figure 3) to generate replacement data by reusing data stored in an extended playback buffer, and placing the re-used replacement data on an external network.